DOCUMENT RESUME

ED 369 754 SP 035 199

AUTHOR Guyton, Edith

TITLE Relationships among Economic Diversity and Context of

Student Teaching Placements and Educational Attitudes

and Performance of Pre-Service Teachers.

PUB DATE Apr 94

NOTE 19p.; Paper presented at the Annual Meeting of the

American Educational Research Association (New

Orleans, LA, April 4-8, 1994).

PUB TYPE Speeches/Conference Papers (150) -- Reports -

Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Context Effect; Cultural Context; Early Childhood

Education; Graduate Study; Higher Education; Low

Income; *Performance Factors; Poverty Areas;

*Practicums; Predictor Variables; Preservice Teacher Education; *Socioeconomic Status; *Student Attitudes;

*Student Teaching; Undergraduate Study; Urban

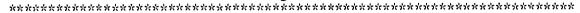
Universities

IDENTIFIERS *Preservice Teachers

ABSTRACT

Students graduating from early childhood programs at a southeastern urban university in June 1992 and June 1993 completed the Educational Attitudes Inventory and the Teacher Efficacy Scale upon entry to the program, before entry to a practicum experience with kindergarten students, and upon completion of both the practicum experience and a student teaching experience in grades 1-4. Forty-eight students were in a master's level initial certification program and 59 were in a traditional undergraduate program. Analysis of subjects' attitudes and performance in relation to the economic diversity and context of student teaching placements revealed that: (1) having a teacher-centered attitude had a negative relationship with personal teaching efficacy; (2) having a student-centered attitude was not a predictor of performance; (3) the key to improving student performance may be in reducing the teacher-centered dimension rather than increasing student-centered attitude; (4) being placed in schools serving larger numbers of poor children negatively affected students' practicum performance but positively affected student teaching performance, perhaps because students more skilled in teaching poorer children chose such placements for student teaching; (5) less than adequate context, relationships with cooperating teachers, and classroom role models had a negative effect on the performance of practicum students; and (6) school context was not a significant factor for student teaching performance. (Contains 26 references.) (JDD)

^{*} from the original document.





^{*} Reproductions supplied by EDRS are the best that can be made *

RELATIONSHIPS AMONG ECONOMIC DIVERSITY AND CONTEXT OF STUDENT TEACHING PLACEMENTS AND EDUCATIONAL ATTITUDES AND PERFORMANCE OF PRE-SERVICE TEACHERS

Edith Guyton Georgia State University

Paper presented at the annual meeting of the American Educational Research Association, New Orleans, April, 1994.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E. Luyton

TO THE EDUCATIONAL RESOURCES "NEORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy



INTRODUCTION

A generally accepted and understood goal for teacher education is the development of teachers capable of working with diverse student populations. The primary method for achieving the goal is placing students in field experiences in schools with diverse populations. Diversity is sometimes defined broadly, but its most typical terms application is in of racial/ethnic/economic differences. Regardless of student diversity, the context of field experiences also has been posited to have a strong influence on teacher socialization. The objective of this paper is to present findings from a study about relationships among economic diversity and context of student teaching and educational attitudes and performance.

REVIEW OF THE LITERATURE

School Context. Consideration of the school context must be set within a teacher socialization framework. One socialization paradigm identified by Zeichner (1990) is the interpretive paradigm in which socialization is the product of interaction between the school and the individual. The key term is "interaction;" school context may inhibit or encourage certain actions or attitudes, but the teacher's personal characteristics interact with those factors to produce the school context effect. Blase (1990) refers to this phenomenon as a redefinition of self within the institutional context.

Hoy and Feldman (1987) averred that school context had two 1) affective context which is the ambience of the school created by such things as teacher morale and 2) objective context which is the socio-economic status of the school. Zeichner (1984) found that the following factors influenced the development perspectives: teacher-pupil ratio, resources, authority relations, school values and ideals, and collegial influence. Driscoll and Kulman (1989) posited dual influences in teacher socialization: 1) personal which includes teacher attitudes education program and teacher other teachers organizational which includes and school They also found that first year teachers who went environment. through a school-based alternative program were proactive and interactive in their socialization and not unduly influenced by Hoy and Woolfolk (1990) had student teachers negative factors. rate school context based on support from college supervisors, other student teachers, cooperating teacher, and other teachers in the school. They found no interaction between context and efficacy or custodial attitude but did find a decrease in teaching efficacy and an increase in custodial attitudes. McNeely and Mertz (1990) obtained similar findings.

Kagan (1992) reviewed current research on the role of context in teacher socialization. She reported four contextual factors affecting growth and success. The teaching assignment (the nature of the content and pupils to be taught); colleagues' willingness to



provide support; parental relationships; and degree of autonomy and

leadership afforded teachers.

Teacher Attitudes. Shaw and Wright (1967) defined the term attitude as "a relatively enduring system of evaluative, affective reactions based upon and reflecting the evaluative concepts or beliefs which have been learned about the characteristics of a

social object or class of social objects" (p. 3).

Harvey, Prather, White, Alter, and Hoffmeister (1966) and Rose and Medway (1981) found that teachers with different attitudes vary in their teaching behaviors. Bunting's research (1984, 1985) used the labels "student-centered" and "directive" to classify teachers' educational attitudes. She found that teachers who were more student-centered used instructional techniques that encourage active and direct student involvement in learning, allowed students to predict, infer, generalize, and evaluate as well as make decisions about their educational instruction. The directive label corresponds to more teacher-centered behavior, suggesting a custodial approach to classroom management and a reliance on conservative instructional techniques. Pajares (1992) provided empirical and theoretical support for the influence of beliefs (such as efficacy and educational attitude) on teacher behavior.

Though most teacher education programs stress the desirability of democratic, humanistic, progressive approaches to education, considerable evidence (Lanier & Little, 1986; Zeichner & Tabachnick, 1981) indicated that many of the effects of teacher education on attitudes and beliefs are temporary. As beginning teachers become socialized into the profession, they often leave behind the innovative practices and progressive attitudes developed during their preservice experiences (Cooney, 1985; Etheridge, 1987), although some studies (Jordell, 1987; Lawson, 1992; McDaniel, 1991; Pigge & Marso, 1987; Weinstein, 1990) have reported that teachers' attitudes are relatively stable in the first year.

Teacher's Sense of Efficacy. Teacher's sense of efficacy is a multidimensional construct consisting of at least two dimensions that correspond to Bandura's (1977) two-component model of selfefficacy (Ashton & Webb, 1986; Gibs n & Dembo, 1984; Tracz & Gibson, 1986). In applying Bandura's model to teachers and teacher efficacy, Gibson and Dembo (1984) referred to Bandura's outcome expectancy as the degree to which teachers believe that students can be taught given such factors as family background, academic school conditions (teaching efficacy). ability and as the teacher's teaching efficacy personal characterized evaluation of their own ability to bring about positive student change and motivation, corresponding to Bandura's second construct of efficacy.

Research by Ashton and Webb (1986) found that teachers' beliefs in students' educability were negatively related to teachers' use of strong control tactics and positively related to supportive, interactive styles permitting open communication and involvement of students in decision making. Teachers' beliefs in their personal teaching efficacy were positively related to teachers' maintenance of a secure, accepting classroom climate,



4

support of student initiative, and concern with meeting the needs

of all students.

Teacher efficacy and student achievement were found to be significantly related in numerous research studies (Armor, et.al., 1976; Ashton & Webb, 1986; Berman, McLaughlin, Bass, Pauly & Zellman, 1977; Gibson & Dembo, 1984; Tracz & Gibson, 1986). Teacher efficacy also has been related to better teaching practices with low-achieving students (Gibson & Dembo, 1984; Ashton & Webb, 1982).

METHOD

Subjects

The subjects of this study were students graduating from early childhood programs at a southeastern urban university in June, 1992 and June, 1993. Forty eight students were in a master's level initial certification program, and 59 were in a traditional undergraduate program. Average student age at program entry was 29.41. Gender distribution was 94.4% female and 5.6% (5) male. The group included two 2 Asian students (1.9%) and soven African American students (5.6%).

Measurements

Educational Attitudes Inventory. The Educational Attitudes Inventory (EAI) (Bunting, 1988) is made up of two factor-analytically derived scales describing student-centered/progressive and teacher-centered/directive teaching views. Item responses on the EAI are in the form of a Likert type scale with a five-point continuum of options. The progressive scale has a maximum score of 95 points; the directive scale has a maximum score of 75 points. Split-half reliability measures for the two scales are .89 for the

progressive scale and .73 for the directive scale.

Teacher Efficacy Scale. The Teacher Efficacy Scale (Gibson & Dembo, 1984) measures two aspects of efficacy. Personal teaching efficacy is defined as a self-evaluation of one's ability to bring about positive student change. Teaching efficacy is defined as the belief that students are capable of learning regardless of home environment, motivation and other factors. The scale was tested for internal consistency and yielded a Cronbach's alpha coefficient of .78 for personal teaching efficacy and .75 for teaching efficacy for 16 of 30 items. Because acceptable reliability coefficients resulted from only 16 of an original 30 items (Gibson & Dembo, 1984), only those 16 items were used. Maximum score for personal teaching efficacy is 54 and for teaching efficacy is 37.

School Context. The contexts of school placements were measured through students' reports. Students rated their placements based on physical school context, affective school context, physical classroom context, affective classroom context, student behavior, cooperating teacher as a role model, cooperating teacher's treatment of children, the relationship between the student and the cooperating teacher, and overall performance of the supervising teacher. The measures created a school context rating



(range 4-20), classroom context rating (3-15), and teacher rating (4-20). The high correlations for these measures allowed combining the scores for one context measure (range 11-55).

The socioeconomic status of the school was based on the percentage of students eligible for the Chapter I Program. These data came from the Georgia Department of Education, Office of

Statistical Services.

Performance. Each student participated in two full time field experiences, one in kindergarten (practicum) and one in grades 1-4 (student teaching). Performances in both experiences were rated using instruments in <u>Student Teaching</u>: <u>An Interactive Approach</u> (Galina & Jordan, 1991), a program developed for an urban university's early childhood program. Student teaching performance was rated once a week in the following areas: transitions and routines; small group instruction; large group instruction; student assessment; interpersonal skills; planning; organization; teaching skills; management of time, resources, and environment; and professionalism. The college supervisor's weekly observation and cooperating teacher and student teacher reports of events during the week formed the basis for the rating. Each assessment category has a list of factors to be considered in rating performance. College supervisors are trained in the use of the rating system by watching it being administered for one quarter and then being watched and advised while using it another quarter. All college supervisors meet each quarter and rate video tapes of student teachers and compare ratings for reliability. At the end of student teaching each student has a "score" which is the percentage of all possible points in all categories.

Data Collection

Students completed the EAI and Teacher Efficacy Scale upon entry to the program, before entry to the practicum experience, and upon completion of both student teaching experiences.

Students rated school context for practicum and student teaching experiences. School SES was determined for each student's

school for each experience.

Statistical Analyses

Pearson product-moment correlations were computed for all pairs of variables. The variables are: (a) performance in practicum (PRACPER); (b) performance in student teaching (STPER);

(c) teacher-centered educational attitude (EAIT 1,2,3);

(d) student-centered educational attitude (EAIS 1,2,3);

(e) teaching efficacy (EFFT 1,2,3); (f) personal teaching efficacy (EFFP 1,2,3); (g) practicum socio-economic status of school (PRACSES); (h) student teaching socio-economic status of school (STSES);

(i) student teaching context of school (STCXT); and (j) practicum

context of school (PCXT)

The correlation matrix produced is Table 1.

Backward elimination regression analysis was performed for the models outlined in Figure 1. This method was chosen since it is



hypothesized that school context, school SES, and attitudes affect attitudes and performance, but no order of influence is posited. Backward elimination eliminates non-significant variables step by step in a regression equation based on the variable's F value. The process produces the strongest model, one for which all variables have a significant influence on the dependent variable.

Findings

The model with teaching efficacy as the dependent variable was not significant. Student-centered attitude was the only variable related to personal teaching efficacy, explaining 21% of the variance. The most powerful model with personal teaching efficacy at the end of the program as the dependent variable (Tables 1 and 2) included teacher-centered attitude at the end of the program and personal teaching efficacy at end of program. Teacher-centered attitude (a negative relationship) and personal teaching efficacy explained 30% of the variance in student-centered attitude.

The most powerful model with practicum performance as the dependent variable (Tables 3 and 4) includes practicum SES and school context, personal teaching efficacy at end of program and teacher-centered attitude at end of program (a negative relationship). The more traditional, directive the teaching attitude, the lower rated the performance. The model also shows that the lower the school SES, the lower rated the performance in

practicum.

The most powerful model with student teaching performance as the dependent variable (Tables 5 and 6) includes student teaching SES and teacher centered attitude at end of program (a negative relationship), accounting for 9% of the variance. Interestingly, the relationship between performance and SES was positive, meaning the lower the school SES, the higher rated the performance.

DISCUSSION. Teacher centered attitude predicted performance, not surprising in an early childhood program focused on student centered teaching and learning. More interesting is that student centered attitude is not a predictor of performance. Mean student centered score indicates that most of the pre-service teachers professed allegiance to more progressive attitudes and since the EAI measures two separate dimensions, the key to better performance may be in reducing the teacher centered dimension rather than

Low SES had a negative relationship with performance during practicum and a positive relationship with student teaching performance. Being placed in schools serving larger numbers of poor children negatively affected students practicum performance but positively affected student teaching performance. During student teaching, students requested either an urban or suburban placement. Most of the lower SES schools were urban schools. Students specifically choosing placement in lower SES schools seems to have created a "natural selection" of people who were more skilled and more confident in teaching poorer students.

School context related only to practicum performance. It could be that difficulties in teaching led to a lower assessment of



the placement context based on the need for an explanation for less than anticipated success. Less than adequate context (whether real or perceived), relationships with cooperating teachers, and classroom role models seem to have a negative effect on the performance of practicum students. This finding underlines the importance of good and compatible field placements. School context was not a significant factor for student teaching performance; it may be that student teachers had more confidence and thus were less affected by external factors.

Personal teaching efficacy, confidence in one's ability to teach children, predicted student-centered attitude. A confident teacher may be more of a risk taker who can move away from more traditional, teacher-centered ideas and behavior. Personal efficacy also was predictive of practicum performance but not of student teaching performance. This phenomenon may be explained by the fact that the efficacy measure was taken prior to practicum. An additional measure taken after practicum and before student teaching may have a positive relationship with student teaching performance.

CONCLUSIONS. This study indicates the following:

1. Placing preservice teachers in schools with good morale, pleasant surroundings, a compatible and welcoming cooperating teacher who is a good role model may be just as important as pupils' backgrounds in determining success in full tome field experiences.

2. Letting students choose to work in lower SES schools may enhance chances for success, a conclusion consistent with Haberman's (1987) theories about the importance of selection in

educating urban teachers.

3. Students whose attitudes are consistent with teacher education

program goals will enhance teaching performance.

4. Further analysis of these data expanding the model by adding variables (e.g., attitude measures at the beginning of the program) and/or using other statistical techniques (e.g., path analysis) is indicated.



REFERENCES

- Armor, D., Conry-Osequera, P., Cox. M., King, N. McDonnell, L., Pascal, A., Pauly, E., & Zellman, G. (1976). Analysis of the school preferred reading program in selected Los Angeles minority schools. (Report No. R-2007-LAUSD). Santa Monica, CA: The Rand Corporation.
- Ashton, P.T., & Webb, R.B. (1986). Making a difference:

 <u>Teachers's sense of efficacy and student achievement</u>. New
 York: Longman.
- Bandura, A. (1977). <u>Social learning theory</u>. Englewood Cliffs, NJ: Prentice-Hall.
- Berman, P., McLaughlin, M.W., Bass, G., Pauley, E., & Zellman, G. (1977). Federal programs supporting educational change. Santa Monica, CA: The Rand Corporation. (ERIC Document Reproduction Service No. ED 140 432).
- Bunting, C.E. (1984). Dimensionality of teacher education beliefs: Validation study. <u>Journal of Experimental Education</u>, 52, 188-192.
- Cooney, T. (1985). A beginning teacher's view of problem solving.

 <u>Journal of Research in Mathematics Education</u>, <u>16</u>, 5-10.
- Driscoll, A., & Kuhlman, J.L. (1989). <u>Socialization of beginning teachers: Connection with preservice programs</u>. Paper presented at the meeting of the American Educational Research Association, San Francisco.
- Etheridge, G.W. (1987). <u>Graduated teaching internships: An overview and major findings</u>. Paper presented at the meeting of the Mid-South Educational Research Association, Mobile, AL. (ERIC Document Reproduction Service No. ED 291 724)
- Galina, B.M & Jordan, L. (1991). <u>Student teaching: An interactive approach</u>. Atlanta: Georgia State University
- Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. <u>Journal of Educational Psychology</u>, 76(4), 569-582.
- Haberman, M (1987). Recruiting and selecting teachers for urban schools. New York: ERIC Clearinghouse on Urban Education.
- Harvey, D.J. Prather, M.S., White, B.J., Alter, R.D., & Hoffmeister, J.K. (1966). <u>Teachers' belief systems and preschool atmospheres</u>. Journal of Educational Psychology, <u>57</u>, 373-381.



- Hoy, W.K. & Feldman, J.A. (1987). Organizational health. The concepts and its measure. <u>Journal of Research and Development in Education</u>, 20(4), 30-38.
- Hoy, W.K., & Woolfolk, A.E. (1990). Socialization of student teachers. American Educational Research Journal, 27, 279-300.
- Kagan, D.M. (1992). Professional growth among preservice and beginning teachers. Review of Educational Research, 62(2), 129-170.
- Lanier, J.E., & Little, J.W. (1986). Research on teacher education. In M.C. Wittrock (Ed.) <u>Handbook of Research on Teaching</u>. New York: Macmillan.
- Lawson, H.A. (1992). Beyond the new conception of teacher induction. <u>Journal of Teacher Education</u>, <u>43</u>(3), 163-172.
- McDaniel, J.E. (1991). <u>Close encounters: How do student teachers</u>

 <u>make-sense of the social foundations?</u> Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.
- McNeely, S.R., & Mertz, N.T. (1990). Cognitive constructs of preservice teachers thinking about teaching. Paper presented at the Annual Meeting of the American Educational Research Association, Boston.
- Pajares, M.F. (1992). Teachers beliefs and educational research: Cleaning up a messy construct. Review of Educational Research, 62(3), 307-332.
- Pigge, F.L., & Marso, R.N. (1987) The influence of preservice training and teaching experience upon attitudes and concerns about teaching. Paper presented at the annual meeting of the American Education Research Association, Washington, DC.
- Shaw, M.E., & Wright, J.M. (1967). Scales for the measurement of attitudes. New York: McGraw Hill.
- Tracz, S.M., & Gibson, S. (1986). <u>Effects of efficacy on academic achievement</u>. Paper presented at the annual meeting of the California Educational Research Association. (ERIC Document Reproduction Service No. ED 281 853)
- Weinstein, C. (1988). Preservice teacher's expectations about the first year of teaching. <u>Teaching and Teacher Education</u>, 4, 31-40.



- Zeichner, K.M. (1984). Individual and institutional influences on the development of teacher perspectives. In Tabachnick, B.R. and Zeichner, K.M. The development of teacher perspectives: Final Report. Madison, WI: Wisconsin Center for Education Research. ED266099
- Zeichner, K.M., & Tabachnick, R.B. (1981). Are the effects of university teacher education washed out by school experience?

 Journal of Teacher Education, 32, 7-11.



Table 1

Model Variables and Coefficients for Student-Centered Attitude at End of Program (EAIS3) Regressed on Teacher-Centered Attitude at End of Program (EAIT3) and Personal Teaching Efficacy at End of Program (EFFP3)

Multiple R R Square Adjusted R S Standard En		F Significance of F	15.262 .000	
Analysis of V	Variance			
Regression Residual	DF. 3 70	Sum of Squares 407.757 911.229	Mean Square 135.919 13.018	
Variable	Mean	Std. Dev.		
EAIS3	91.014	4.251		

Table 2
Regression Coefficients for EAIS3 Regressed on EAIT3 and EFFP3

6.342

5.545

Variable	В	Standard Error B	Beta	Т	Significance of T	
EAIT3	218	.067	326	-3.283	.002	
EFFP3	.334	.076	.436	4.392	.000	



EAIT3

EFFP3

31.689

44.216

Andrew to S.

Table 1
Correlation Matrix: Student Teaching Performance, Practicum Performance, Educational Attitude, Efficacy, SES of School, School Context

rl				T																		
EFFT3	101.	.245•	340	607: -	256•	270••	870.	.034	.153		301	.472	1.000	121	8		.197	.087	048	\$10	3	070.
EFFT2	.131	.240•		5/0: -	337**	152	.048	.092	921.		.178	1.000	.472**	2.022	224•		.322••	.036	090:	3	\$5.	090.
EFFT1	690.	.195		324••	157	339••	044	043	\$5		1.000	.178	••10£"	4 90:	190	100.	.031	136	2,142		6/1.	017
EAIS3	590.	271.		249•	296••	287••	.371••	••864.	80	200:-	400:	.129	.153	.165	9001		.462••	.160	.187		163	.123
EAIS?	.137	.112		268**	491 ••	282•	•• l6b'	1.000	***************************************	.490	043	.092	.034	\$00		sct.	.440••	0/1.	2773**		126	139
EAISI	.589	133		356**	227•	152	1.000	49100	44726	.3/0	044	.048	.078	173		.310	.392**	.190	030		207•	.058
ЕАПЗ	. 231•	12000	240:	.506••	••\$09.	1.000	152	28200		- 287	339**	151	- 270••	121	701.	043	140	961.	780		076	046
EAIT?	191	•	100-	.573••	1.000	••609°	. 2270	40100	1/42	296••	157	- 337**	256	200	707:	203•	298••	.012	9	061	.122	.159
EAIT!	DAS	2000	+ .50¢	1.000	.573**	\$060	15600	90%	607.	249•	324••	. 073	••050	207: -	751.	600:	217•	126		089	.157	181.
PPER	2773	617.	1.000	304••	- 309••	3200	123		711.	.172	.195	2400	047	C+7:	023	089	151	\$200	/07: -	.057	.213•	073
CTDED	5 8	1.000	.273••	046	191	2310	157	YC 0.	.137	190:	690		134	101.	218•	.062	710	150	/61	.291•	010	\$90.
		STPEK	PRACPER	EAITI	EATT		EAILS	EAISI	EAIS2	EAIS3	1.1333		EFF12	EFFT3	EFFPI	EFFP2	EEEBJ	Errrs	PSES	STSES	PCXT	STCXT

• - Signif. LE .05

14

16

Table 1 (Cont.)
Correlation Matrix: Student Teaching Performance, Practicum Performance, Educational Attitur, Efficacy, SES of School, School Context

	i di	CEED	FFFP3	WSES	SSES	WTCXT	STCXT
daduta	217	090	.034	751	167.	011	.065
	- 023	680.	151.	207•	750.	.213•	073
EAIT	.132	800.	217•	.126	680	.157	181.
EAITZ	.202•	203*	298••	.012	150	.122	.159
ЕАПТЗ	.153	043	140	961.	084	076	046
EAIS I	871.	.310••	.392**	190	.038	207•	.058
EAIS2	.005	.353**	.440**	170	.278**	126	139
EA1S3	.165	.319•	.462**	.159	.187	163	.123
EFFT1	.064	150.	.031	136	142	.175	017
EFF12	022	.224•	.322**	.036	090	.048	090
EFFT3	121	.001	.197•	037	048	.035	070.
ген	1,000	.350••	.255**	046	077	.082	.126
EFFP2	.350••	1,000	.536••	.215•	121.	075	* 00
EFFP3	.255**	.536**	1,000	.151	.193	247•	680.
WSES	046	.215•	.131	1.000	.123	345**	.120
SSES	077	121.	.193	.123	1.000	127	158
WTOTCXT	.082	2.075	247*	.345	127	1.000	045
STOTCXT	.126	+00	680.	911.	159	045	1.000

• - Signif. LE .05

Figure 1
Models Tested by Backward Elimination Multiple Regression Analysis

¹ Dependent Variables	Independent Variables					
PRACPER	² PRACSES	³EAIT2	EAIS2	EFFT2	EFFP2	⁴PCRACXT
STPER	5STSES	EAIT2	EAIS2	EFFT2	EFFP2	⁶ STCXT
EAIS3	STSES	STCXT	EAIS3	EFFT3	EFFP3	
EAIT3	STSES	STCXT	EAIT3	EFFT3	EFFP3	
EFFT3	STSES	STCXT	EAIT3	EAIS3	EFFP3	
EFFP3	STSES	STCXT	EAIT3	EAIS3	EFFT3	

- Practicum Performance; Student Teaching Performance; Student-Centered Educational Attitude (at end of program); Teaching Efficacy (at end of program); Personal Teaching Efficacy (at end of program)
- 2 Practicum SES
- 3 2 = administration prior to practicum
- 4 Practicum Context
- 5 Student Teaching SES
- 6 Student Teaching Context

Table 3

Model Variables and Coefficients for Practicum Performance (PRACPER) Regressed on Practicum SES (PRACSES), Practicum Context (PRACCXT), Personal Teaching Efficacy (EFfP3), and Teacher-Centered Attitude (EAIT3)

Multiple R	.567	F	8.866
R Square	.321	Significance of F	.0000
Adjusted R Square	.285		
Standard Error	2.643		

	DF	Sum of Squares	Mean Square	
Regression	4	247.675	61.919	
Residual	75	523.812	6.984	
Residual	75	523.812	0.984	

Variabale	Mean	Std. Dev.	
PRACPER	93.862	3.125	
PRACSES	15.037	18.033	
PRACCXT	36.925	4.333	
EFFP3	44.325	5.440	
EAIT3	31.650	6.469	

Table 4
Regression Coefficients for PRACPER Regressed on PSES, PCXT, EFFP3, EAIT3

		Standard				
Variable	В	Error B	Beta	T	Significance of T	
PRACSES	032	.018	185	-1.800	.076	
PRACCTXT	.159	.075	.220	2.179	.037	
EFFP3	.164	.057	.285	2.898	.005	
EAIT3	169	.047	349	-3.594	.001	

Table 5

Model Variables and Coefficients for Student Teaching Performance (STPER) Regressed on Student Teaching SES (STES) and Teacher-Centered Attitude (EAIT3)

Multiple R		.296	F	3.399	
R Square		.087	Significance of F		
Adjusted R	Square	.062			
Standard Er	ror	2.519			
Analysis of	Variance			<u> </u>	
	DF		Sum of Squares	Mean Square	
Regression	2		43.142	21.571	
Residual	71		450.642	6.347	
Variable	Mean		Std. Dev		_
STPER	96.054	 	2.601		
STSES	14.230	1	19.360		
EAIT3	31.689	١	6.342		

Table 6
Regression Coefficients for STPER Regressed on STSES and EAIT3

		Standard			
Variable	В	Error B	Beta	T	Significance of T
STSES	.030	.015	.220	1.940	.056
EAIT3	082	.046	199	-1.759	.083